

Oliver Keith Baker**A. Professional preparation**

Massachusetts Institute of Technology, *Physics*, B.S. (1981), MA (1981), *Thesis topic: Neutrino-Nucleus Scattering*.

Stanford University, *Physics*, M.S. (1984).

Stanford University, *Mathematics*, M.S. (1984).

Stanford University, *Nuclear Resonance Effect on Atomic Electron Capture*, Ph.D. (1987).

Los Alamos National Laboratory Post-doctoral Fellow, *Nuclear Physics* (1986-1988)

B. Appointments

Hampton University 1999 – present, Professor of Physics; 1993 – 1999, Associate Professor of Physics; 1989 – 1993, Assistant Professor of Physics. 1995, Acting Director NuHEP research center.

Jefferson Lab 1989 – present, Staff Scientist.

Los Alamos National Laboratory 1990 – 1993, Consultant.

Wayne State University 1993, Visiting Scientist.

N. Carolina State University 1988 – 1989, Instructor.

Stanford University 1981 – 1986 Research Assistant.

C. Selected publications

1. Time-zero fission-fragment detector based on low-pressure multiwire proportional chambers, K. Assamagan, O.K. Baker, NIM **A426**, 405 (1999).
2. Preliminary Study of a New Type of Microstrip Gas Chamber on Sapphire Substrate, Yu.L. Grishkin, A.N. Martemyanov, A. Akindinov, M.M. Chumakov, O.I. Pogorelko, S. Pozdnyakov, P.N. Shishov, V.I. Ushakov (Moscow, ITEP), B. Kross, S. Majewski, A. Weisenberger, R. Wojcik, O.K. Baker, I. Hwang, D. Lyons, G. Niculescu, I.M. Niculescu (Jefferson Lab & Hampton U.), G. Smith (Brookhaven), P. Geltenbort, A. Oed (Laue-Langevin Inst.), Nucl. Inst. and Meth, **A354**, 309 (1995).
3. Second Coordinate Readout in Resistive Straw Drift Tubes. S. Majewski, J. Gerbi, B. Kross, A. Weisenberger, and K. Baker. Nucl. Inst. and Meth, **A348**, 307 (1994)
4. The High Momentum Spectrometer Drift Chambers in Hall C at CEBAF. By O.K. Baker, J. Beaufait, R. Carlini, J. Cha, S. Danagulian, A. Johnson, B. Kross, S. Majewski, A. McCauley, W. Naing, G. Niculescu, I. Niculescu, T.S. Shin, W. Vulcan (Hampton U. & Jefferson Lab & North Carolina A&T State U Greensboro), Nucl.Instrum.Meth.**A367**, 92 (1995)
5. Electroproduction of the S(11)(1535) resonance at high momentum transfer, C.S. Armstrong and the Jefferson Lab Hall C collaboration, Phys. Rev. **D60**, 052004 (1999).
6. Coherent π^0 photoproduction on the deuteron up to 4 GeV, D.G. Meekins and the Jefferson Lab Hall C collaboration: D.J. Abbott, A. Ahmidouch, C.S. Armstrong, J. Arrington, K.A. Assamagan, O.K. Baker, S.P. Barrow, D.P. Beatty, D.H. Beck, S.Y. Beedoe, E.J. Beise, J.E. Belz, C. Bochna, P.E. Bosted, E.J. Brash, H. Breuer, R.V. Cadman, L. Cardman, R.D.

BIOGRAPHICAL SKETCHES

- Carlini, J. Cha, N.S. Chant, G. Collins, C. Cothran, W.J. Cummings, S. Danagoulian, F.A. Duncan, J.A. Dunne, D. Dutta, T. Eden, R. Ent, B.W. Filippone, T.A. Forest, H.T. Fortune, V.V. Frolov, H. Gao, D.F. Geesaman, R. Gilman, P.L.J. Gueye, K.K. Gustafsson, J-O. Hansen, M. Harvey, W. Hinton, R.J. Holt, H.E. Jackson, C.E. Keppel, M.A. Khandaker, E.R. Kinney, A. Klein, D.M. Koltenuk, G. Kumbartzki, A.F. Lung, D.J. Mack, R. Madey, P. Markowitz, K.W. McFarlane, R.D. McKeown, Z-E. Mezziani, M.A. Miller, J.H. Mitchell, H.G. Mkrtchyan, R.M. Mohring, J. Napolitano, A.M. Nathan, G. Niculescu, I. Niculescu, T.G. O'Neill, B.R. Owen, S.F. Pate, D.H. Potterveld, J.W. Price, G.L. Rakness, R.D. Ransome, J. Reinhold, P.M. Rutt, C.W. Salgado, G. Savage, R.E. Segel, N. Simicevic, P. Stoler, R. Suleiman, L. Tang, B.P. Terburg, D. van Westrum, W.F. Vulcan, S.E. Williamson, M.T. Witkowski, S.A. Wood, C. Yan, B. Zeidman, *Phys.Rev.* **C60**, 2201(1999).
7. Electroproduction of the $\Delta(1232)$ Resonance at High Momentum Transfer, V.V. Frolov and the Jefferson Lab Hall C collaboration., *Phys.Rev.Lett.* **82**, 45 (1999).
 8. Longitudinal and Transverse Cross Sections in the $H(e,e'K^+)\Lambda$ Reaction, G. Niculescu and the Jefferson Lab Hall C collaboration, *Phys. Rev. Lett.* **81**, 1805 (1998).
 9. Kaon Electroproduction on Deuterium, J. Reinhold *et al.*, *Nucl. Phys.* **A639**, 197c (1998).
 10. The Space-like Kaon Electromagnetic Form Factor, O.K. Baker, *Nucl. Phys.* **A623**, 351c (1997).

D. Synergistic activities

Member, Nuclear Science Advisory Committee (NSAC).

Member, NSF Special Emphasis Panel in Nuclear Physics.

Member, CEBAF Strategic Planning Committee.

Faculty member at Hampton University (an HBCU) and participant in activities designed to involve minorities in science, including HUGS (summer graduate program at HU).

E. Collaborators and other affiliations

(i) Recent and current collaborators: Harold Ogren (Indiana University), Seog Oh (Duke University) and others in the ATLAS Collaboration. The Jefferson Lab Hall C collaboration (see author list in publication list) from the following institutions: Hampton U. & Maryland U. & Jefferson Lab & Kent State U. & Yerevan Phys. Inst. & Temple U. & Bucharest U. & William-Mary Coll. & Argonne & North Carolina A&T State U Greensboro & Amsterdam, Vrije U. & Rome, Iss & Infn, Rome & Northwestern U. & Grenoble U. & Penn U. & Rensselaer Poly & Oregon State U. & Houston U. & Kyungpook National U. & Tohoku U. & Florida International U.

(ii) Ph.D. thesis advisor: Walter E. Meyerhof (Stanford). B.S. thesis adviser: T. William Donnelly (MIT). Post-doctoral advisor: Michael Paciotti (LANL).

(iii) Thesis Advisor and Post-doctoral Sponsor Post-doctoral scholars: Shelton Beedoe (NCATSU), Paul Gueye (Hampton University), Ketevi Assamagan (Hampton University), Geoffery Savage (Hampton University), Kevin Beard (JLab). Ph.D. Students: Gabriel Niculescu (1998) Thesis topic: "Kaon Electroproduction," Win Naing (1999) Thesis topic: "Hypernuclear Spectroscopy." Masters degree students: W. Naing, M.S. (1993) Thesis topic "Planar Multiwire Drift Chamber"; T. Shin, M.S. (1993) thesis topic "Straw Tube Drift Chamber." Five post-docs and eleven graduate students advised.